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BACTERIAL LEAF SPOT OF POINSETTIA

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Leaf spot (stem rot) of Poinsettia caused by Corynebacterium poinsettiae Starr and Pirone was first described in 1942, occurring in New Jersey, Maryland, Pennsylvania, and New York.

The disease was found in 1958 at Delray Beach, Florida (Palm Beach county), and has since been observed in several other counties. Results of the survey conducted in the fall of 1966 appear in Fig. 1, showing counties where the disease has been found.

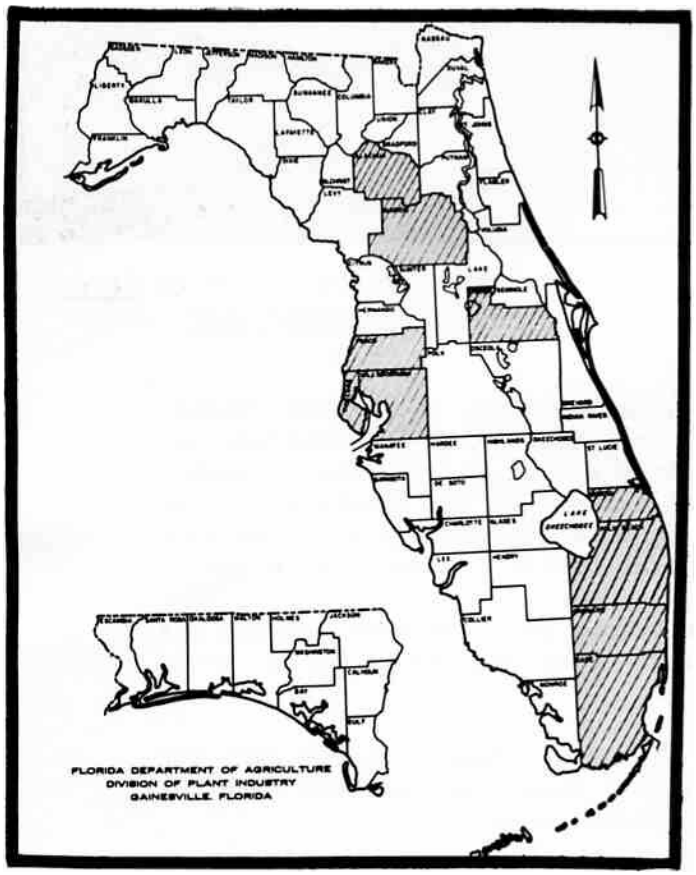

Fig. 1. Counties where disease has been found.

Fig. 2. Poinsettia leaf showing symptoms of bacterial leaf spot.

SYMPTOMS. The most prevalent symptoms are those on the leaves. They are brown, angular spots surrounded by a yellow halo (Fig. 2). The spots sometimes appear in rows along the midrib and the lateral veins. Often a glistening exudate can be seen on the necrotic spots on the undersurface of the leaves. The affected leaves turn yellow and drop prematurely, leaving a defoliated stem (Fig. 3).

Fig. 3. Diseased plant severely defoliated as a result of bacterial leaf spot.

Fig. 4. Stem symptoms caused by Corynbacterium poinsettiae.

Plants that have carried the disease for some time may show dark, watersoaked streaks on the green stems (Fig. 4), together with a shriveling and dying of the bracts of the terminal bud. This phase of the disease is generally found on mature plants and is not as common as the spotting of the leaves. For this reason the disease should be more appropriately called bacterial leaf spot rather than stem rot, bacterial canker or bacterial blight.

CONTROL. Once the bacteria have gained entrance into the stem tissue the plant cannot be cured. In the absence of leaf symptoms the bacteria could still be present in the stem.

Cuttings for propagation should be taken only from those plants that are known to be free of the disease. Infected plants should be isolated in order to prevent the spreading of the bacteria to healthy plants.

Experimentally, the plants could be sprayed regularly with either a copper-maneb mixture or with Agrimycin 500 to protect the young leaves from becoming infected.